

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (currently amended): A method in a data processing system for generating documentation for a source code file in a software project, the method comprising the steps of:

selecting a source code file from the project;

identifying the language of the source code;

generating a transient meta model for the source code;

determining whether the file is new, and if the file is new,

adding symbols from the file to the transient meta model by,

obtaining a template for the language[:], and

parsing the source code with the symbols to the transient meta model;

determining whether the file is updated, and if the file is updated,

updating the symbols from the file to the transient meta model by,

obtaining a template for the language, and

parsing the source code with the updated symbols to the transient meta model;

determining whether the file is deleted, and if the file is deleted,

deleting symbols of the file from the transient meta model by,

obtaining a template for the language, and

parsing the source code with the symbols from the transient meta model;

generating a textual documentation that describes the source code, the textual documentation having portions that correspond to portions of the source code;

generating a diagram including at least one diagram element that visually represents the corresponding portion of the source code; and

correlating the diagram elements to the corresponding portions of the textual documentation by providing hyperlinked references in the diagram that link diagram elements to the corresponding portions of the textual documentation.

2. (cancelled)

3. (previously presented): The method of claim 1, wherein the step of generating a diagram comprises generating a graphics interchange format (GIF) image of each diagram element and generating an image map for an image of the diagram element images.

4. (currently amended): A data processing system for generating documentation for a source code file in a software project, comprising:

means for selecting a source code file from the project;

means for identifying the language of the source code;

means for generating a transient meta model for the source code;

means for determining whether the file is new, and if the file is new,

means for adding symbols from the file to the transient meta model by,

means for obtaining a template for the language[[:]] , and

means for parsing the source code with the symbols to the transient meta model;

means for determining whether the file is updated, and if the file is updated,

means for updating the symbols from the file to the transient meta model by,

means for obtaining a template for the language, and  
means for parsing the source code with the updated symbols to the transient meta  
model;  
means for determining whether the file is deleted, and if the file is deleted,  
means for deleting symbols of the file from the transient meta model by,  
means for obtaining a template for the language, and  
means for parsing the source code with the symbols from the transient meta model;  
means for generating a textual documentation that describes the source code, the  
textual documentation having portions that correspond to portions of the source code;  
means for generating a diagram including at least one diagram elements that visually  
represents the corresponding portion of the source code; and  
means for correlating the diagram elements to the corresponding portions of the  
textual documentation by providing hyperlink references in the diagram that link diagram  
elements to the corresponding portions of the textual documentation.

5. (currently amended): A computer-readable medium containing instructions for  
controlling a data processing system to perform a method for generating documentation for  
source code in a software project, the method comprising the steps of:

selecting a source code file from the project;  
identifying the language of the source code;  
generating a transient meta model for the source code;  
determining whether the file is new, and if the file is new,  
adding symbols from the file to the transient meta model by,

obtaining a template for the language[[]] , and  
parsing the source code with the symbols to the transient meta model;  
determining whether the file is updated, and if the file is updated,  
updating the symbols from the file to the transient meta model by,  
obtaining a template for the language , and  
parsing the source code with the updated symbols to the transient meta model;  
determining whether the file is deleted, and if the file is deleted,  
deleting symbols of the file from the transient meta model by,  
obtaining a template for the language, and  
parsing the source code with the symbols from the transient meta model;  
generating a textual documentation that describes the source code, the textual  
documentation having portions that correspond to portions of the source code;  
generating a diagram including at least one diagram element that visually represents  
the corresponding portion of the source code; and  
correlating the diagram elements to the corresponding portions of the textual  
documentation by providing hyperlink references in the diagram that link diagram elements to  
the corresponding portions of the textual documentation.

6. (cancelled)

7. (previously presented): The computer readable medium of claim 5, wherein the step  
of generating a diagram comprises generating a graphics interchange format (GIF) image of  
each diagram element and generating an image map of the diagram element images.

8. (currently amended): A data processing system, comprising:

a secondary storage device containing a software project, the software project comprising source code;

a memory comprising a software development tool that selects a source code file from the project, identifies the language of the source code, generates a transient meta model for the source code, determines whether the file is new, and if the file is new, adds symbols from the file to the transient meta model by, obtaining a template for the language, and parsing the source code with the symbols to the transient meta model, and determines whether the file is updated, and if the file is updated, updates the symbols from the file to the transient meta model by, obtaining a template for the language, and parsing the source code with the updated symbols to the transient meta model, and determines whether the file is deleted, and if the file is deleted, deletes symbols of the file from the transient meta model by, obtaining a template for the language, and parsing the source code with the symbols from the transient meta model, and generates a documentation that describes the source code, the documentation including a diagram portion and a text portion and having hypertext markup language (HTML) links between the diagram portion and the text portion; and  
a processor for running the software development tool.

9. (cancelled)

10. (cancelled)

11. (cancelled)

12. (previously presented): The method of claim 21, wherein the step of generating textual documentation comprises generating hypertext markup language (HTML) documentation that is displayable by a web browser.

13. (previously presented): The method of claim 21, wherein the step of generating images comprises generating graphics interchange format (GIF) images that are displayable by a web browser.

14. (previously presented): The method of claim 21, wherein the step of mapping the images comprises mapping the images into rectangular regions.

15. (previously presented): The method of claim 1, wherein the documentation is hypertext markup language (HTML) documentation displayable by a web browser.

16. (previously presented): The method of claim 1, wherein the links between the diagram portion and the text portion are hypertext markup language (HTML) links.

17. (previously presented): The method of claim 4, wherein the documentation is hypertext markup language (HTML) documentation displayable by a web browser.

18. (previously presented): The data processing system of claim 4, wherein the links between the diagram portion and the text portion are hypertext markup language (HTML) links.

19. (previously presented): The computer-readable medium of claim 5, wherein the documentation is hypertext markup language (HTML) documentation displayable by a web browser.

20. (previously presented): The computer-readable medium of claim 5, wherein the links between the diagram portion and the text portion are hypertext markup language (HTML) links.

21. (currently amended): A method for generating a documentation for source code in a software project wherein the documentation includes a diagram portion and a text portion, the method comprising the steps of:

selecting a source code file from the project;

choosing to generate a documentation that describes the source code, the textual documentation having portions that correspond to portions of the source code;

selecting the desired options for the documentation;

identifying the language of the source code;

generating a transient meta model for the source code;

determining whether the file is new, and if the file is new,

adding symbols from the file to the transient meta model by,

obtaining a template for the language[[]] , and  
parsing the source code with the symbols to the transient meta model;  
determining whether the file is updated, and if the file is updated,  
updating the symbols from the file to the transient meta model by,  
obtaining a template for the language , and  
parsing the source code with the updated symbols to the transient meta model;  
determining whether the file is deleted, and if the file is deleted,  
deleting symbols of the file from the transient meta model by,  
obtaining a template for the language, and  
parsing the source code with the symbols from the transient meta model;  
generating the textual portion of the source code documentation;  
generating images for diagram elements that correspond to portions of the textual  
documentation;  
mapping the images into regions of the image map according to predefined diagram  
rules and options selected by the user; and  
generating hyperlink references from the regions of the image map of the diagram to  
the textual documentation.

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